

Why Use LOCAD?



LOCAD technologies enable detection and identification of bacterial, fungi, some chemicals, and eventually viruses in a rapid, reproducible manner. A number of environments, liquids, and powders in solutions may be tested without having to analyze specimens in a laboratory, sometimes waiting 3 to 5 days for results. The instruments and procedures are designed to be:

- Rapid (15 – 120 min)
- Portable
- Small (shoebox size)
- Point-of-use
- Easy to operate
- Perform multiple (20-100) tests simultaneously
- Versatile – easily modified/interchangeable to detect multiple targets of interest to different organizations
- Utilize latest biochemical techniques that provide alternate methods for detecting the estimated 95% of bacteria that cannot be cultured

The specific technology payoff for NASA is described in the Value and Benefits section.

Because the tests performed by these instruments are easily adjustable or interchangeable, LOCAD technologies may also provide valuable information for other government agencies, private industry, or academic research.